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PREPARATIONS FOR THE UNITED NATIONS CONFERENCE ON ENVIRONMENT AND DEVELOPMENT ON THE BASIS OF GENERAL ASSEMBLY RESOLUTION 44/228 AND TAKING INTO ACCOUNT OTHER RELEVANT GENERAL ASSEMBLY RESOLUTIONS: CROSS-SECTORAL ISSUES

SAFE AND ENVIRONMENTALLY SOUND MANAGEMENT OF RADIOACTIVE WASTES

(Section II, Chapter 14 of Agenda 21)

Text submitted by the Chairman on the basis of negotiations held on document A/CONF.151/PC/100/Add.4

PROGRAMME AREA

PROMOTE THE SAFE AND ENVIRONMENTALLY SOUND MANAGEMENT OF RADIOACTIVE WASTES

Basis for action

1. Radioactive wastes are generated in the nuclear fuel cycle as well as in nuclear applications (the use of radionuclides in medicine, research and industry). The radiological and safety risk from radioactive wastes vary from very low in short-lived, low-level wastes up to very large for high-level wastes. Annually about 200,000 m^3 of low-level and intermediate-level waste and 10,000 m^3 of high-level waste (as well as spent nuclear fuel destined for final disposal) is generated world wide from the nuclear power production. These volumes are increasing as more nuclear power units are taken into

operation, nuclear facilities are decommissioned and the use of radionuclides increases. The high-level waste contains about 99 per cent of the radionuclides and thus represents the largest radiological risks. The waste volumes from nuclear applications are generally much smaller, typically some tens of cubic metres or less per year and country. However, the activity concentration, especially in sealed radiation sources, might be high, thus justifying very stringent radiological protection measures. The growth of waste volumes should continue to be kept under close review.

2. The safe and environmentally sound management of the radioactive wastes, including their minimization, transportation and disposal, is important, given their characteristics. In most countries with a substantive nuclear power programme technical and administrative measures have been taken to implement a waste management system. In many other countries, still only in preparation for a national nuclear programme or with only nuclear applications, such systems are still needed.

Objective

3. To ensure that radioactive wastes are safely managed, transported, stored and disposed of, with a view to protecting human health and the environment, within a wider framework of an interactive and integrated approach to radioactive waste management and safety.

Activities

Management-related:

4. States, in cooperation with relevant international organizations where appropriate, should undertake the following activities:

(a) To promote policies and practical measures to minimize and limit, where appropriate, the generation of radioactive wastes, and to provide for their safe processing, conditioning, transportation and disposal;

(b) To support efforts within the IAEA to develop and promulgate radioactive waste safety standards or guidelines and codes of practice as an internationally accepted basis for the safe management and disposal of radioactive wastes;

(c) To promote safe storage, transportation and disposal of radioactive wastes, as well as spent radiation sources and spent fuel destined for final disposal, from nuclear reactors, in all countries and in particular in developing countries, by facilitating the transfer of relevant technologies to those countries, and/or the return to the supplier of radiation sources after their use, in accordance with relevant international regulations or guidelines;

(d) To promote proper planning, including where appropriate environmental impact assessment, of safe management of radioactive waste, including emergency procedures, storage, transportation and disposal, prior to and after activities which generate such waste.

International and regional cooperation and coordination:

5. The following activities should be undertaken:

(a) States should strengthen their efforts to implement the Code of Practice for International Transboundary Movement of Radioactive Waste and, under the auspices of IAEA, in cooperation with relevant international organizations dealing with different modes of transport, keep the question of such movements under active review, including the desirability of concluding a legally binding instrument;

(b) States should encourage the London Dumping Convention to expedite work to complete studies on replacing the current voluntary moratorium on disposal of low-level radioactive wastes at sea by a ban, taking into account the precautionary approach, with a view to taking a well informed and timely decision on the issue;

(c) States should not promote or allow the storage or disposal of high-level, intermediate-level and low-level radioactive wastes near the marine environment, unless, following a precautionary approach, it can be ascertained that such a storage or a disposal is unlikely to cause harm to the marine environment or to interfere with other legitimate uses of the sea;

(d) States should not export radioactive wastes to countries which prohibit the import of such wastes, such as the contracting parties to the Bamako Convention, to Lomé IV, or to other relevant conventions, where such prohibition is provided for;

(e) States should respect the decisions taken by parties to other relevant regional conventions dealing with other aspects of safe and environmentally sound management of radioactive wastes.

Means of implementation

[Financial and cost evaluation:

6. The costs at national level to manage and dispose of radioactive wastes are considerable and will vary, depending on the technology used for disposal.

7. An annual cost of about US$ 8 million will be needed to implement this programme through international organizations (mainly IAEA) to further develop international regulations, to promote research policies and international cooperation and to support developing countries to take preventive and corrective action.]

Scientific and technological means:

8. States should undertake the following activities in cooperation with international organizations where appropriate:

(a) To promote research and development of methods for the safe and environmentally sound treatment and disposal of high-level radioactive waste;

(b) To conduct research and assessment programmes concerned with evaluating the health and environmental impact of radioactive waste disposal.

Capacity-building (including human resources development):

9. Assistance to developing countries to establish and/or strengthen radioactive waste management infrastructures - including legislation, organizations, trained manpower and facilities for the handling, processing, storage and disposal of wastes, generated from nuclear applications.